STEREOLEPIS GIGAS, Ayres.

Hab. California,

If the Oligorus gigas of Günther, or Centropristis gigas of Owen truly belongs to this genus, the name of the Californian species must be replaced by another: that of S. Californicus will be appropriate.

Description of the Genus OXYJULIS Gill.

BY THEODORE GILL.

In the present article, there is given a detailed description of the genus

Oxyjulis recently named, not hitherto described.

As the Semicossyphus pulcher (Günther ex Ayres) is only known through the description of Ayres, made at a time when the classification of the Labroids was far less exact that now, its generic position remains to be confirmed, although there is little doubt that it really is a Semicossyphus.

Genus SEMICOSSYPHUS Günther.

Synonymy.

Semicossyphus Günther, Annals and Magazine of Natural History, ser. iii. vol. viii. p. 384; ib. in Catalogue of the Fishes in the British Museum, vol. iv. p. 99, 1861-2. Bleeker, Proc. Zoological Society of London, 1861, p. 415.

SEMICOSSYPHUS PULCHER Günther.

Synonymy.

Labrus pulcher Ayres. Proc. California Academy of Natural Sciences, vol. i. p. 3, 1854. Ayres, Proc. Boston Society of Natural History, vol. v. p. 101, 1854.

Semicossyphus pulcher Günther, Annals and Magazine of Natural History, ser iii. vol. viii. p. 384, 1861. Günther, Catalogue of the Fishes in the British Museum, vol. iv. p. 99, 1862.

Hab .- Coast of California, at San Diego, (Ayres).

Genus OXYJULIS Gill.

Synonymy.

= Oxyjulis Gill, Proc. Academy of Natural Sciences of Philadelphia, 1863, p. 223.

Julis sp., Girard, Gill. Halichæres sp., Günther.

Pseudojulis sp., Günther.

Body elongated and slender, much compressed and with the sides nearly flat, with the caudal peduncle oblong and not constricted; anus little in ad-

vance of the middle of the length.

Scales moderate, less than thirty along lateral line, small and closely appressed on the breast; each one is oblong, pentagonal, corrugated at the centre, with numerous lines radiating towards the back and posterior sides, and with fainter ones extending forwards; exposed surface rhomboid. Lateral line continuous, simply tubular, mostly concurrent with and near the back, but deflected on the scales under the posterior portion of dorsal, and thence continued on the tail along the middle to the caudal fin.

Head oblong, conic, and acute in front, slightly curved above and below, much compressed and gradually decreasing in width to the snout, transversely convex above. Snout longer than the eye. Eyes mostly or wholly in the anterior half of the head. Cheeks and opercula naked and unarmed; suboperculum with an oblong membranous extension. Nostrils simple, in front of

upper angle of eye.

Mouth scarcely protractile, with the cleft scarcely oblique; intermaxillary bones thin, wide, and their plane surface nearly horizontal, their posterior processes broad and short; supramaxillary extended downwards at angle, but almost entirely behind the intermaxillary. Dentary rapidly increasing in height towards the angle.

Lips rather thin, with several folds.

Teeth on the crest of the jaw conic, curved uniserial, decreasing backwards, two or three anterior ones of the upper jaw much enlarged, but none behind.

Branchial membrane free below.

Branchiostegal rays six.

Dorsal fin with no scales at base, entire, commencing over or behind the base of pectorals, with nine spines, not produced beyond the membrane, but enveloped behind in a skinny extension; soft portion nearly even and subangulated behind.

Anal fin with three spines like those of the dorsal, and with the soft portion rather low.

Caudal fin subtruncated, covered at the base with small scales.

Pectoral fins rather narrow, obliquely truncated behind.

Ventral fins beneath or behind the pectoral, angulated at the end of the first ray.

D. IX. 13. A. III. 13.

Scales 27-28 $\frac{2}{12}$

The lower pharyngeal bone is transverse and narrow, bow-shaped, and with much compressed narrow acterior process, regularly emarginated behind, in front gibbous on each side of the middle, and with the converging sides nearly straight; the posterior surface is vertical and extended downward, and from that a ridge crosses the bone towards its upper surface; the front is beset with about three rows of conic treth, of which those of the hinder row are enlarged, and one or two rows are advanced on the front anterior process.

Oxyjulis is distinguished among all of its tribe by the produced acutely conic head; it differs from Julis, besides, in the more compressed body, the form of the jaws, and the presence normally of nine dorsal spines; * from Pseudojulis, it is separable on account of the form of the head, structure of the jaws, the brevity of the dorsal spines and their production in their cotaneous sheaths, as

well as by the form of the lower pharyngeal bone.

Only one species of the genus is known which had formerly been referred by Girard and the author to Julis, and by Günther to Pseu lojulis.

OXYJULIS MODESTUS Gill.

Synonymy.

Julis modestus Girard, Proc. Academy of Natural Sciences of Philadelphia,
vol. vii. p. 151, 1854. Girard, Explorations and Surveys for a Railroad
Route, &c., vol. x. Fishes, p. 163.
Halichæres californicus Günther, Annals and Magazine of Natural History, ser.

iii. vol. viii. p. 386.

Julis modestus Gill, Proc. Academy of Natural Sciences of Philadelphia, 1862, p. 142.

Pseudojulis modestus Günther, Catalogue of the Fishes in the Collection of the British Museum, vol. iv. p. 168.

Hab .- Coast of California.

^{*} The number eight which was formerly assigned to the type of the genus is abnormal. Misled by its occurrence in the first specimen examined, and by its coincidence with the dentition of the typied Julis, I, too, hastily regarded it as a species of that genus as restricted by Gunther, and thus retained it in the same genus in which Girard had placed it.